AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions and listings of claims in the application. No claims have been amended in this paper.

LISTING OF CLAIMS:

1. (Previously presented) Interface apparatus comprising:

a panel without an optical guide and scattering particles therein defining at least one edge;

at least one detector arranged along said at least one edge of said panel;

and an electromagnetic radiation beam emitter operative to direct at least one beam of electromagnetic radiation onto said panel from a variable distance and at a variable angle;

said panel being operative to transmit electromagnetic radiation from said at least one beam impinging thereon to said at least one edge thereof, for detection by said at least one detector, said panel being operative to attenuate said electromagnetic radiation passing therethrough to said at least one edge as a function of the distance traveled by the electromagnetic radiation through the panel, whereby said at least one detector is operative to provide at least one output usable to determine said variable distance and said variable angle.

2. (Previously presented) Interface apparatus according to claim 1 and wherein said panel is selected from a group consisting of: a display, a mobile telephone display panel, a hand-held computing device display panel, a television panel and an input pad panel.

3-6. (Canceled).

7. (Previously presented) Interface apparatus according to claim 1 and wherein said at least one detector comprises a substantially linear array of detectors.

8. (Previously presented) Interface apparatus according to claim 1 and wherein said at least one detector is capable of detecting said electromagnetic radiation at predetermined frequencies in at least one of visible and non-visible ranges.

9. (Previously presented) Interface apparatus according to claim 1 and wherein said electromagnetic radiation beam emitter is operative to provide at least one of a substantially conical beam, at least one substantially collimated beam, at least one beam having a substantially asymmetrical cross section, at least one beam having a substantially pyramidal shape and at least one beam having a substantially polygonal cross section.

10. (Previously presented) Interface apparatus according to claim 1 and wherein said electromagnetic radiation beam emitter is operative to provide a plurality of beams.

11-14. (Canceled).

15. (Previously presented) Interface apparatus according to claim 1 and wherein said electromagnetic radiation beam emitter is operative to provide at least one of a modulated beam, a beam of visible light and a beam of non-visible electromagnetic radiation.

16-17. (Canceled).

18. (Previously presented) Interface apparatus according claim 1 and also comprising detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of location,

orientation, shape and size of at least one impingement spot defined by impingement of said at least one electromagnetic radiation beam on said panel.

19-21. (Canceled).

22. (Previously presented) Interface apparatus according to claim 1 and also comprising detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter.

23. (Canceled).

24. (Previously presented) Interface apparatus according to claim 1 and also comprising detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter, said location being defined as a Z-distance between a plane of said panel along a line perpendicular thereto and a plane parallel to said plane of said panel in which a beam origin of said electromagnetic radiation beam emitter is located.

25. (Previously presented) Interface apparatus according to claim 1 and also comprising detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter, said location being defined as a point-to-point distance between a beam origin of said electromagnetic radiation beam emitter and a center of an impingement location of said beam on said panel.

26. (Previously presented) Interface apparatus according to claim 1 and also comprising detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of a trajectory of said electromagnetic radiation beam emitter.

27. (Previously presented) Interface apparatus according to claim 1 wherein impingement of said beam on said panel provides a substantially elliptical impingement spot.

28. (Previously presented) Interface apparatus according to claim 27 and also comprising analysis circuitry operative to determine a ratio of a major axis and a minor axis of said elliptical impingement spot, thereby to determine an angle of intersection between said beam and said panel.

29. (Previously presented) Interface apparatus according to claim 1 and comprising analysis circuitry operative to employ detected variations in intensity of said electromagnetic radiation at different locations on an impingement spot defined by impingement of said beam on said panel, thereby to assist in determination of an angle of intersection between said beam and said panel.

30. (Previously presented) An interface method comprising:

providing a panel without an optical channel and scattering particles therein defining at least one edge, at least one detector arranged along said at least one edge of said panel and an electromagnetic radiation beam emitter operative to direct at least one beam of electromagnetic radiation onto said panel from a variable distance and at a variable angle;

directing said beam of electromagnetic radiation from said electromagnetic radiation beam emitter onto said panel, thereby producing at least one impingement spot;

employing said panel to transmit electromagnetic radiation from said at least one impingement spot to said at least one edge thereof, said panel being operative to attenuate said electromagnetic radiation passing therethrough to said at least one edge as a function of the distance traveled by the electromagnetic radiation through the panel;

detecting, by said at least one detector, said electromagnetic radiation transmitted by said panel to said at least one edge;

employing an output of said at least one detector to determine said variable distance and said variable angle.

31. (Previously presented) An interface method according to claim 30 and wherein providing said panel comprises providing a panel selected from a group consisting of: a display a mobile telephone display panel, a hand-held computing device display panel, a television display panel and an input pad panel.

32-35. (Canceled).

36. (Previously presented) An interface method according to claim 30 and wherein providing said at least one detector comprises providing a substantially linear array of detectors.

37. (Previously presented) An interface method according to claim 30 and wherein said detecting by said at least one detector comprises detecting electromagnetic radiation at predetermined frequencies in at least one of visible and non-visible ranges.

38. (Previously presented) An interface method according to claim 30 and wherein providing said electromagnetic radiation beam emitter comprises providing an electromagnetic radiation beam emitter which is operative to provide at least one of a substantially conical beam, at least one substantially collimated beam, at least one beam having a substantially asymmetrical cross section, at least one beam having a

substantially pyramidal shape and at least one beam having a substantially polygonal cross section.

39. (Previously presented) An interface method according to claim 30 and wherein providing said electromagnetic radiation beam emitter comprises providing an electromagnetic radiation beam emitter which is operative to provide a plurality of beams.

40-43. (Canceled).

44. (Previously presented) An interface method according to claim 30 and wherein providing said electromagnetic radiation beam emitter comprises providing an electromagnetic radiation beam emitter which is operative to provide at least one of a modulated beam, a beam of visible light and a beam of non-visible electromagnetic radiation.

45-46. (Canceled).

47. (Previously presented) An interface method according to claim 30 and also comprising providing detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of location, orientation, shape and size of at least one impingement spot defined by impingement of said at least one electromagnetic radiation beam on said panel.

48-50. (Canceled).

51. (Previously presented) An interface method according to claim 30 and also comprising providing detector output processing circuitry operative to receive at least one

output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter.

52. (Canceled).

53. (Previously presented) An interface method according to claim 30 and also comprising providing detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter, said location being defined as a Z-distance between a plane of said panel along a line perpendicular thereto and a plane parallel to said plane of said panel in which a beam origin of said electromagnetic radiation beam emitter is located.

54. (Previously presented) An interface method according to claim 30 and also comprising providing detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of at least one of the location and angular orientation of said electromagnetic radiation beam emitter, said location being defined as a point-to-point distance between a beam origin of said electromagnetic radiation beam emitter and a center of an impingement location of said beam on said panel.

55. (Previously presented) An interface method according to claim 30 and also comprising providing detector output processing circuitry operative to receive at least one output of said at least one detector and to provide an output indication of a trajectory of said electromagnetic radiation beam emitter.

56. (Previously presented) An interface method according to claim 30 and also comprising providing a substantially elliptical impingement spot by impingement of said beam on said panel.

57. (Previously presented) An interface method according to claim 56 and also comprising: providing analysis circuitry operative to determine a ratio of a major axis and a minor axis of said elliptical impingement spot; and employing said analysis circuitry to determine an angle of intersection between said beam and said panel.

58. (Previously presented) An interface method according to claim 30 and also comprising: providing analysis circuitry operative to employ detected variations in intensity of said electromagnetic radiation at different locations on an impingement spot defined by impingement of said beam on said panel; and employing said analysis circuitry to assist in determination of an angle of intersection between said beam and said panel.